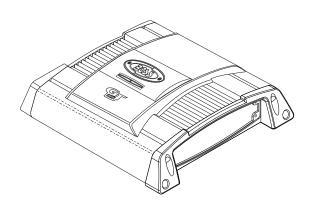


Service Manual



MODEL: GT1000M

SPECIFICATIONS

Maximum power output (2 Ohms): 850W x 1ch

RMS power Output: 200W x 2ch

Frequency response: 9Hz - 50KHz

S/N Ratio: 103dB

Low Pass Crossover (Variable) 45Hz - 90Hz

High Pass Crossover (Fixed) 150Hz

Power Source Voltage: 14.4V

Ground: Negative

External dimensions: 236(W)x55(H)x248(D)mm

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them. The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

- 2. Place the parts and wiring back in their original positions after replacement or re-wiring. For proper circuit construction, use of insulation tubes, bonding, gaps to PCB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection. If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.
- 3. Check for safety after repair. Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots. If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
- 4. Caution in removal and making wiring connection to the parts for the automobile. Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions regarding chips.

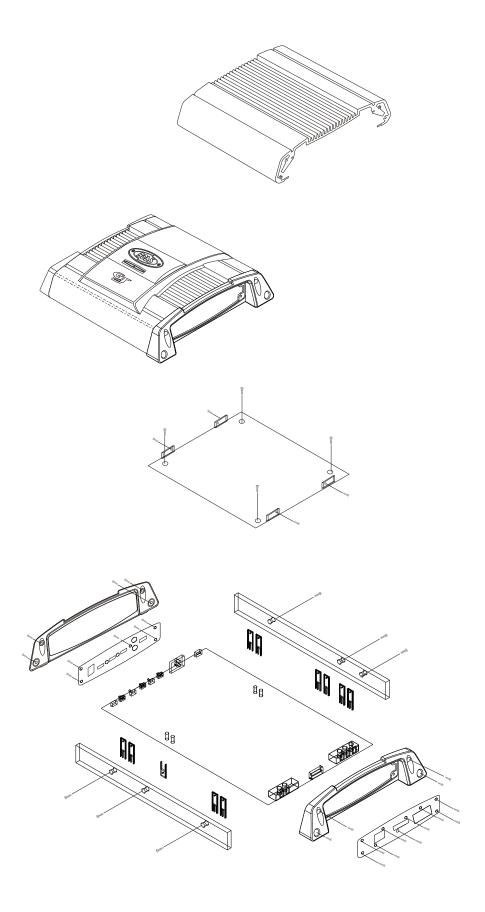
Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

6. Cautions in handling flexible PCB

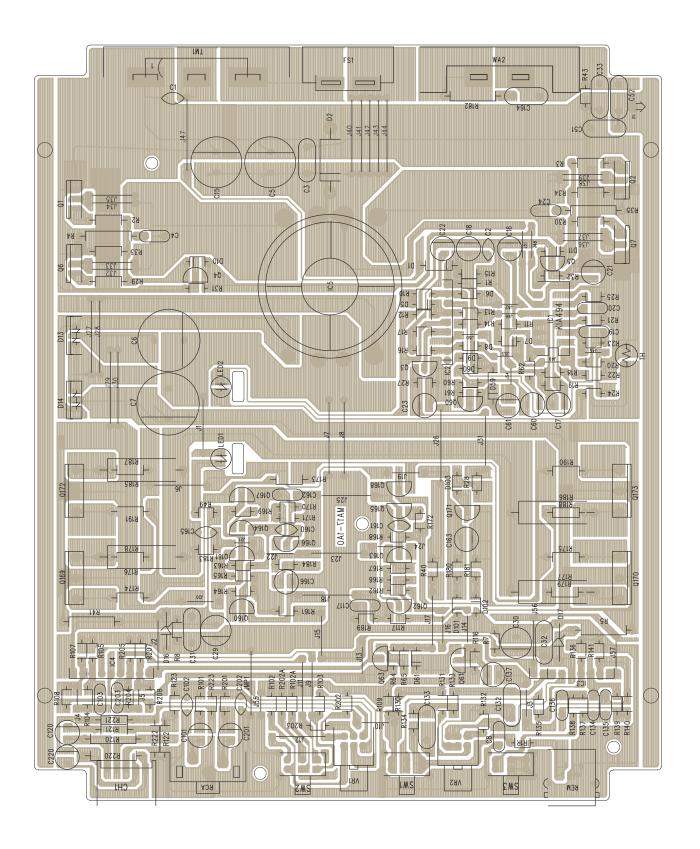
Before working with a soldering iron, make sure that the iron tip temperature is around 270... Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.

7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

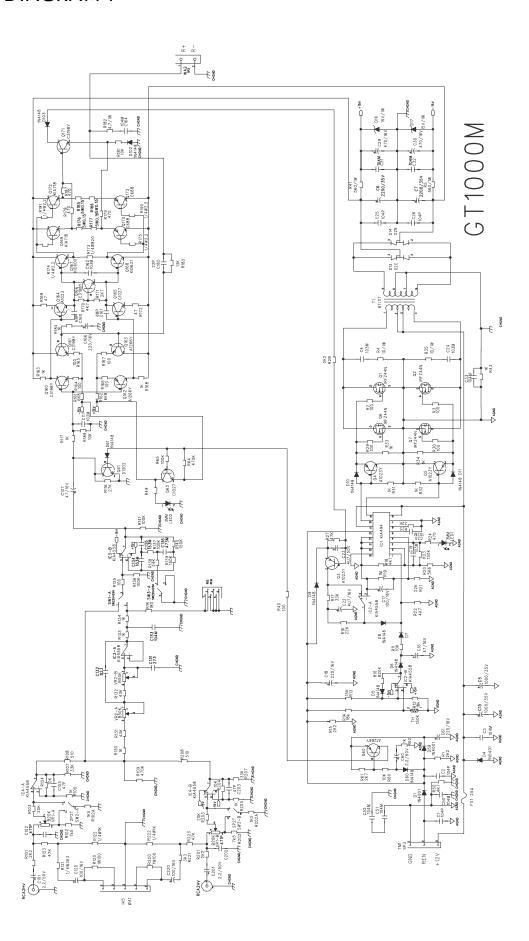
EXPLODED VIEW



PRINTED CIRCUIT BOARD - 1



CIRCUIT DIAGRAM 1



PARTS LIST - 1

Part Number	desc	Location	qty
CR-00290X0-V0S00	RCA Jack		1
CT-SOCKET0-2MA22	Speaker terminal		1
CT-SOCKET0-3MA22	Power terminal		1
CW-50000X0-H0025	High Input Jack		1
EC-C4104X0-Z6769	C Cap 0.1(Z)	C1,2	2
EC-C4220X0-D5050	C Cap 22PF(D)	C165	1
EC-C4470X0-Z5050	C Cap 47PF(Z)	C103,203	2
EC-C4680X0-J5050	C Cap 68PF(J)	C160,161	2
EC-E2107X0-M50A1	E Cap 100UF/16	C17,120,220,60	4
EC-E2227X0-M63A1	E Cap 220UF/16	C18,21,166	3
EC-E2476X0-M50A1	E Cap 47UF/16V	C16,137	2
EC-E2477X0-M50A1	E Cap 470UF/16	C29,30,61	3
EC-E4225X0-M50A1	E Cap 2.2UF/50	C101,201	2
EC-E4475X0-M50A1	E Cap 4.7UF/50	C22,23,163	3
EC-E6108X0-MA3B5	E Cap 1000/35V	C5,15	2
EC-E6228X0-MA3B5	E Cap 2200/35V	C6,7	2
EC-M5102X0-J5590	Mylar Cap 0.001	C20,117	2
EC-M5103X0-J5590	Mylar Cap 0.01	C4,19,24,162	4
EC-M5104X0-JA0A3	Mylar Cap 0.1	C3,31~33,51,52,133,164	8
EC-M5153X0-J5785	Mylar Cap 0.015	C134,135	2
EC-M5273X0-J66A1	Mylar Cap 0.027	C8	1
EC-M5473X0-J80A1	Mylar Cap 0.047	C136	1
EC-M5823X0-K0000	Mylar Cap 0.082J	C132	1
ED-R2502C0-H0000	Diode ESAC25-02C	D13	1
ED-R2502N0-H0000	Diode ESAC25-02N	D14	1
ED-R4001X0-H0000	Diode IN-4001	D1,59	2
ED-R5401X0-H0000	Diode IN-5401	D2	1
ED-S4148X0-H0000	Diode IN-4148	D5~11,60,61,101~103	12
ED-Z15VXX0-H4744	ZENER IN4744	D16,17	2
EE-R225X70-76002	LED Red 2.5X7MM	LED1	1
EE-R525X70-76002	LED Green 2.5X7MM	LED2	1
EO-IM9B1A0-VXXX8	Transformer		1
ER-HG153X0-HXXXX	THERMISTOR 150K	TH	1
ER-OG022X0-H2526	Resistor 2.2 1/4W	R174,175,190,191	4

PARTS LIST - 2

Part Number	desc	Location	qty
ER-OG100X0-HA04C	Resistor 10 1W	R4,35	2
ER-OG101X0-H1214	Resistor 100 1/8W	R135,164~167	5
ER-OG101X0-H2526	Resistor 100 1/4W	R29,30,2,3	4
ER-OG101X0-HA04C	Resistor 100 1W	R120,220	2
ER-OG102X0-H1214	Resistor 1K 1/8W	R31,32,43,62,105,117,130,133,134,163,168,184,205,J3	14
ER-OG102X0-H2526	Resistor 1K 1/4W	R122,222	2
ER-OG103X0-H1214	Resistor 10K 1/8W	R11,60,180,181,189	5
ER-OG104X0-H1214	Resistor 100K 1/8W	R136,137,141	3
ER-OG105X0-H1214	Resistor 1M 1/8W	R19	1
ER-OG122X0-H1214	Resistor 1.2K 1/8W	R102A,202A,49	3
ER-OG133X0-H1214	Resistor 13K 1/8W	R183	1
ER-OG153X0-H1214	Resistor 15K 1/8W	R13	1
ER-OG154X0-H1214	Resistor 150K 1/8W	R23,139,140	3
ER-OG181X0-H1214	Resistor 180 1/8W	RIR	1
ER-OG183X0-H1214	Resistor 18K 1/8W	R12,14,104,204	4
ER-OG203X0-H1214	Resistor 20K 1/8W	R103,203	2
ER-OG221X0-H2526	Resistor 220 1/4W	R33,34	2
ER-OG222X0-H1214	Resistor 2.2K 1/8W	R1,15,28,101,201,40	6
ER-OG223X0-H1214	Resistor 22K 1/8W	R16,21,25,65	4
ER-OG243X0-H1214	Resistor 24K 1/8W	R138	1
ER-OG272X0-H1214	Resistor 2.7K 1/8W	R61,171	2
ER-OG273X0-H1214	Resistor 27K 1/8W	R116	1
ER-OG331X0-H1214	Resistor 330 1/8W	R173	1
ER-OG332X0-H1214	Resistor 3.3K 1/8W	R121,221	2
ER-OG333X0-H1214	Resistor 33K 1/8W	R17,107,207,123,223	5
ER-OG433X0-H1214	Resistor 43K 1/8W	R131,132	2
ER-OG470X0-H1214	Resistor 47 1/8W	R169,172	2
ER-OG471X0-H1214	Resistor 470 1/8W	R24	1
ER-OG471X0-H2526	Resistor 470 1/4W	R178,179,187,188	4
ER-OG472X0-H1214	Resistor 4.7K 1/8W	R18,22,170,7,8	5
ER-OG473X0-H1214	Resistor 47K 1/8W	R27	1
ER-OG474X0-H1214	Resistor 470K 1/8W	R64,109	2
ER-OG511X0-H1214	Resistor 510 1/8W	R108,208	2
ER-OG561X0-HA04C	Resistor 560 1W	R5,41	2
ER-OG562X0-H1214	Resistor 5.6K 1/8W	R20	1

PARTS LIST - 3

Part Number	desc	Location	qty
ER-OG752X0-H1214	Resistor 7.5K 1/8W	R102,202	2
ER-OG824X0-H1214	Resistor 820K 1/8W	R10	1
ER-WG.15X0-HXXXX	Resistor 0.15 5W	R176,177,185,186	4
ES-S2219X0-H0006	Switch JSS2219		3
ET-C1023X0-PY000	Transistor KTA1023-Y	Q3~5,164	4
ET-C1027X0-NY000	Transistor KTC1027-Y	Q63,165	2
ET-C1266X0-PY000	Transistor A1266Y	Q60,162~163	3
ET-C1302K0-N0000	Transistor KTD-1302	Q61	1
ET-C3198K0-NY000	Transistor KTC3198-Y	Q160,161,166,171	4
ET-CB631X0-P0000	Transistor KTB631-KY	Q168	1
ET-CB688X0-P0000	Transistor KTB688-O	Q170,173	2
ET-CD600X0-N0000	Transistor KTD600-KY	Q167	1
ET-CD718X0-N0000	Transistor KTD718-O	Q169,172	2
ET-FFZ44X0-X0000	Mosfet IRFZ 44N	Q1,2,6,7	4
EW-CS06XX0-05AA0	Bare Wire 6MM	J4,5,55,21,54,53,46,52,50,49,45	11
EW-CS10XX0-05AA0	Bare Wire 10MM	J20,10,13,16,14,19,24,22,48,51	10
EW-CS12XX0-05AA0	Bare Wire 12MM	J15,56,57,36,37,7,8,38,39,32,33,34,35	13
EW-CS15XX0-05AA0	Bare Wire 15MM	J2,12,11,15,17,31,18,23,25,6,1	11
EW-CS17XX0-05AA0	Bare Wire 17MM	J58	1
EW-CS20XX0-05AA0	Bare Wire 20MM	J26~30,47,40~44	11
II-4558LX0-V0008	IC NJM4558L	IC2,3,10	3
II-DBL494X-H0016	IC S-494P	IC1	1
VR-BN203X0-V0A26	VR 20KB T12	VR2	1
VR-BN503X0-V0A26	VR 50KB T12	VR1	1